

ABSTRACT OF THE DISCLOSURE

A solid-state imaging device is provided, which is capable of increasing an S/N ratio while enhancing a dynamic range, when a photoelectric signal is converted
5 into a digital signal. This solid-state imaging device comprises: a plurality of photoelectric conversion devices arrayed in rows and columns, each of the photoelectric conversion devices converting an optical signal into an electric signal and outputting a first
10 signal voltage; a difference signal generation circuit provided for each column, for sequentially inputting the first signal voltage and a second signal voltage obtained by initializing the photoelectric conversion devices, thereafter converting the first signal voltage and the
15 second signal voltage into charges, generating a difference signal therebetween, and then outputting the difference signal after adjusting a gain according to a level of the difference signal; and an analog/digital conversion circuit connected to the output of the
20 difference signal generation circuit.

2025 RELEASE UNDER E.O. 14176